

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/722,903A

Source: JFWHO

Date Processed by STIC: 7-3-05

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/722,903A

DATE: 01/03/2005  
TIME: 14:53:52

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF4\01032005\J722903A.raw

3 <110> APPLICANT: GTC Biotherapeutics, Inc.  
5 <120> TITLE OF INVENTION: Modified Antibodies Stably Produced in Milk and Methods of  
6 Producing Same  
8 <130> FILE REFERENCE: GTC-53  
10 <140> CURRENT APPLICATION NUMBER: 10/722,903A  
11 <141> CURRENT FILING DATE: 2003-11-26  
13 <150> PRIOR APPLICATION NUMBER: US 60/429,606  
14 <151> PRIOR FILING DATE: 2002-11-27  
16 <160> NUMBER OF SEQ ID NOS: 11  
18 <170> SOFTWARE: PatentIn version 3.2  
20 <210> SEQ ID NO: 1  
21 <211> LENGTH: 2028  
22 <212> TYPE: DNA  
23 <213> ORGANISM: Homo sapiens  
26 <220> FEATURE:  
27 <221> NAME/KEY: misc\_feature  
28 <223> OTHER INFORMATION: Human Ig germline H-chain G-E-A region B: gamma-4 constant  
29 region, 3' end  
31 <400> SEQUENCE: 1  
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34 gcaggtggcg ccagccaggt gcacacccaa tgcccatgag cccagacact ggacctgca 120  
36 tggaccatcg cggatagaca agaaccgagg ggcctctgcg ccctggggccc agctctgtcc 180  
38 cacaccgcgg tcacatgca ccacctctt tgcagcttcc accaaggggcc catccgttctt 240  
40 cccctggcg ccctgttcca ggagcacctc cgagagcaca gccgcctgg gctgcctgg 300  
42 caaggactac ttccccgaac cggtgacgggt gtcgtgaaac tcaggcgccc tgaccagcg 360  
44 cgtgcacacc ttcccggttgc tcctacagtc ctcaaggactc tactccctca gcagcgttggt 420  
46 gaccgtgccc tccagcagct tggcacgaa gacctacacc tgcAACgttag atcacaagcc 480  
48 cagcaacacc aagggtggaca agagagttgg tgagaggcca gcacaggggag ggagggtgtc 540  
50 tgcttggaaagc caggctcagc cctctgttcc ggacgcaccc cggctgtgca gccccagccc 600  
52 agggcagcaa ggcatgcccc atctgttcc tcacccggag gcctctgacc accccactca 660  
54 tgctcaggaa gagggttcc tggatttttc caccaggttc ccggcaccac aggctggatg 720  
56 cccctacccc aggcctggcg catacagggc aggtgtcgct ctcagacactt ccaagagcca 780  
58 tatccgggag gaccctggcc ctgacctaag cccacccaa agccaaact ctccactccc 840  
60 tcagtcaga caccttctt cctccagat ctgagtaact cccaattttct tctctgcaga 900  
62 gtccaaatat ggtccccat gcccatcatg cccaggttaag ccaacccagg cctcgccctc 960  
64 cagtcagg cgggacaggt gcccctagat agcctgcattt cagggacagg ccccaaggccgg 1020  
66 gtgtgtacgc atccacccat atcttttcc cagcacctga gttcctgggg ggaccatcag 1080  
68 tcttcctgtt ccccccggaaa cccaaaggaca ctctcatgtat ctcccgacc cctgagggtca 1140  
70 cgtgcgttgt ggtggacgtg agccagggaaag accccggaggt ccagttcaac tggtaacgtgg 1200  
72 atggcgtgga ggtgcataat gccaaagacaa agccgcggga ggagcgttcc aacagcacgt 1260  
74 accgtgttgtt cagcgtcctc accgttccgt accaggactg gctgaacggc aaggagtaca 1320  
76 agtgcaaggt ctccaaacaaa ggcctccgtt cctccatcga gaaaaccatc tccaaagcc 1380  
78 aagggtggac ccacgggggtg cgagggccac acggacagag gccagctgg cccaccctct 1440

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80	gccctggag	tgaccgctgt	gccaacctct	gtccctacag	ggcagccccg	agagccacag	1500					
82	gtgtacaccc	tgcccccatac	ccaggaggag	atgaccaaga	accaggtaag	cctgacactgc	1560					
84	ctggtaaaag	gcttctaccc	cagcgacatc	gcccgtggagt	gggagagcaa	tggcagccg	1620					
86	gagaacaact	acaagaccac	gcctcccggt	ctggactccg	acggctccctt	cttcctctac	1680					
88	agcaggctaa	ccgtggacaa	gagcagggtgg	caggagggga	atgtcttctc	atgctccgtg	1740					
90	atgcatgagg	ctctgcacaa	ccactacaca	cagaagagcc	tctccctgtc	tctgggtaaa	1800					
92	ttagtgccag	ggccggcaag	cccccgctcc	ccggctctc	ggggtcgcgc	gaggatgctt	1860					
94	ggcacgtacc	ccgtctacat	acttcccagg	caccagcat	gaaataaag	caccaccac	1920					
96	tgcctggc	ccctgtgaga	ctgtgatgg	tcttccacg	gtcaggccg	agtctgaggc	1980					
98	ctgagtgaca	tgagggaggc	agagcgggtc	ccactgtccc	cacactgg		2028					
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102	<211> LENGTH:	61										
103	<212> TYPE:	DNA										
104	<213> ORGANISM:	Homo sapiens										
107	<220> FEATURE:											
108	<221> NAME/KEY:	misc_feature										
109	<223> OTHER INFORMATION:	IgG4 Hinge Region Nucleic Acid										
111	<400> SEQUENCE:	2										
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114	t						61					
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120	<213> ORGANISM:	Homo sapiens										
123	<220> FEATURE:											
124	<221> NAME/KEY:	misc_feature										
125	<223> OTHER INFORMATION:	IgG4 Hinge Region Amino Acid										
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129	Glu	Ser	Lys	Tyr	Gly	Pro	Pro	Cys	Pro	Ser	Cys	Pro
130	1					5				10		
133	<210> SEQ ID NO:	4										
134	<211> LENGTH:	33										
135	<212> TYPE:	DNA										
136	<213> ORGANISM:	artificial sequence										
139	<220> FEATURE:											
140	<221> NAME/KEY:	misc_feature										
141	<223> OTHER INFORMATION:	S241P Oligo Nucleic Acid										
143	<400> SEQUENCE:	4										
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147	<210> SEQ ID NO:	5										
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149	<212> TYPE:	PRT										
150	<213> ORGANISM:	artificial sequence										
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154	<221> NAME/KEY:	misc_feature										
155	<223> OTHER INFORMATION:	S241P Oligo Amino Acid										
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159	Gly	Pro	Pro	Cys	Pro	Pro	Cys	Pro	Gly	Lys	Pro	
160	1					5				10		

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163 <210> SEQ ID NO: 6  
 164 <211> LENGTH: 65  
 165 <212> TYPE: DNA  
 166 <213> ORGANISM: Homo sapiens  
 169 <220> FEATURE:  
 170 <221> NAME/KEY: misc\_feature  
 171 <223> OTHER INFORMATION: IgG4 Hinge Region Nucleic Acid  
 173 <400> SEQUENCE: 6  
 174 cttctctctg cagagtccaa atatggtccc ccatgcccatt catgcccagg tccgccaacc 60  
 176 caggc 65  
 179 <210> SEQ ID NO: 7  
 180 <211> LENGTH: 12  
 181 <212> TYPE: PRT  
 182 <213> ORGANISM: Homo sapiens  
 185 <220> FEATURE:  
 186 <221> NAME/KEY: misc\_feature  
 187 <223> OTHER INFORMATION: IgG4 Hinge Region Amino Acid  
 189 <400> SEQUENCE: 7  
 191 Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro  
 192 1 5 10  
 195 <210> SEQ ID NO: 8  
 196 <211> LENGTH: 65  
 197 <212> TYPE: DNA  
 198 <213> ORGANISM: Homo sapiens  
 201 <220> FEATURE:  
 202 <221> NAME/KEY: misc\_feature  
 203 <223> OTHER INFORMATION: IgG2 Hinge Region Nucleic Acid  
 205 <400> SEQUENCE: 8  
 206 cttctctctg cagagcgcaa atgttgtgtc gagtgccac cgtgcccagg tccgccaacc 60  
 208 caggc 65  
 211 <210> SEQ ID NO: 9  
 212 <211> LENGTH: 12  
 213 <212> TYPE: PRT  
 214 <213> ORGANISM: Homo sapiens  
 217 <220> FEATURE:  
 218 <221> NAME/KEY: misc\_feature  
 219 <223> OTHER INFORMATION: IgG2 Hinge Region Amino Acid  
 221 <400> SEQUENCE: 9  
 223 Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro  
 224 1 5 10  
 227 <210> SEQ ID NO: 10  
 228 <211> LENGTH: 33  
 229 <212> TYPE: DNA  
 230 <213> ORGANISM: artificial sequence  
 233 <220> FEATURE:  
 234 <221> NAME/KEY: misc\_feature  
 235 <223> OTHER INFORMATION: Oligo 2014 Nucleic Acid  
 237 <400> SEQUENCE: 10  
 238 gaggagcagt tccagtctac ttaccgagtg gtc 33

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Input Set : A:\Sequence Listing.txt

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241 <210> SEQ ID NO: 11  
242 <211> LENGTH: 11  
243 <212> TYPE: PRT  
244 <213> ORGANISM: artificial sequence  
247 <220> FEATURE:  
248 <221> NAME/KEY: misc\_feature  
249 <223> OTHER INFORMATION: Oligo 2014 Amino Acid  
251 <400> SEQUENCE: 11  
253 Glu Glu Gln Phe Gln Ser Thr Tyr Arg Val Val  
254 1 5 10

**VERIFICATION SUMMARY**

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